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Li

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(54) **MODULAR LED LIGHTING SYSTEMS, INCLUDING FLEXIBLE, RIGID, AND WATERPROOF LIGHTING STRIPS AND CONNECTORS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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(57) **ABSTRACT**

Modular lighting systems are provided that comprise lighting strips physically and electrically connectable with one another by way of flexible connectors. The lighting strip devices can be made of flexible or rigid material to allow for applying the lighting devices along flat as well as contoured surfaces and can be waterproof or water resistant. A modular lighting strip system is provided comprising: two or more lighting strips comprising a non-conductive substrate strip with an electrical circuit; a plurality of light sources operably connected to the electrical circuit; a plug or socket at opposing ends of the strip; one or more connectors for providing electrical and physical interconnection of the lighting strips comprising: one or more plug and/or socket and one or more flexible wires interconnecting the plugs or sockets, which are operably configured to provide for side-by-side interconnection of lighting strips.

20 Claims, 26 Drawing Sheets

